The family Pyramidellidae Gray, 1840 (Mollusca, Gastropoda, Heterostropha) in West Africa. 5. *Afroturbonilla hattenbergeriana* n. gen. n. sp.

La familia Pyramidellidae Gray, 1840 (Mollusca, Gastropoda, Heterostropha) en África Occidental. 5. *Afroturbonilla hattenbergeriana* gen. nov. spec. nov.

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ABSTRACT

A new genus, *Afroturbonilla*, and a new species, *A. hattenbergeriana*, belonging to the family Pyramidellidae are described from the West Africa coast. The shell and the most important morphological characters of the shell are represented. A comparison with related genera and species is made.

RESUMEN

Se describe un nuevo género *Afroturbonilla*, y una nueva especie, *A. hattenbergeriana*, de la familia Pyramidellidae de la costa occidental de África. Se representan la concha y los más importantes caracteres morfológicos de la misma, estableciéndose una comparación con los géneros próximos y especies más similares.

KEY WORDS: Pyramidellidae, *Afroturbonilla hattenbergeriana*, new genus, new species, West Africa, *Paradoxella*, *Styloptygma*, *Syrnolina*.
PALABRAS CLAVE: Pyramidellidae, *Afroturbonilla hattenbergeriana*, nuevo género, nueva especie, África Occidental, *Paradoxella*, *Styloptygma*, *Syrnolina*.

INTRODUCTION

In a series of papers the authors are revising the family Pyramidellidae from West Africa. Complete references to these works can be found in a previous paper (PEÑAS AND ROLÁN, 1998). In the present paper we describe a new species that could not be assigned to any previously described genus. We therefore erect a new genus, *Afroturbonilla*, to contain this species.

MATERIAL AND METHODS

See PEÑAS AND ROLÁN (1998) and the first work in the present supplement.

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RESULTS

Family Pyramidellidae Gray, 1840

Genus *Afroturbonilla* n. gen.

Type species: *Afroturbonilla hattenbergeriana* n. sp.

Diagnosis: Shell slender, fragile, conoid in initial whorls and cylindrical in later ones. A well-defined umbilicus is surrounded by a distinct, prominent spiral ridge. Sculpture of weak axial ribs also covering the spiral ridge.

Etymology: *Afro-*, which relates to Africa, and *Turbonilla*, a genus of Pyramidellidae.

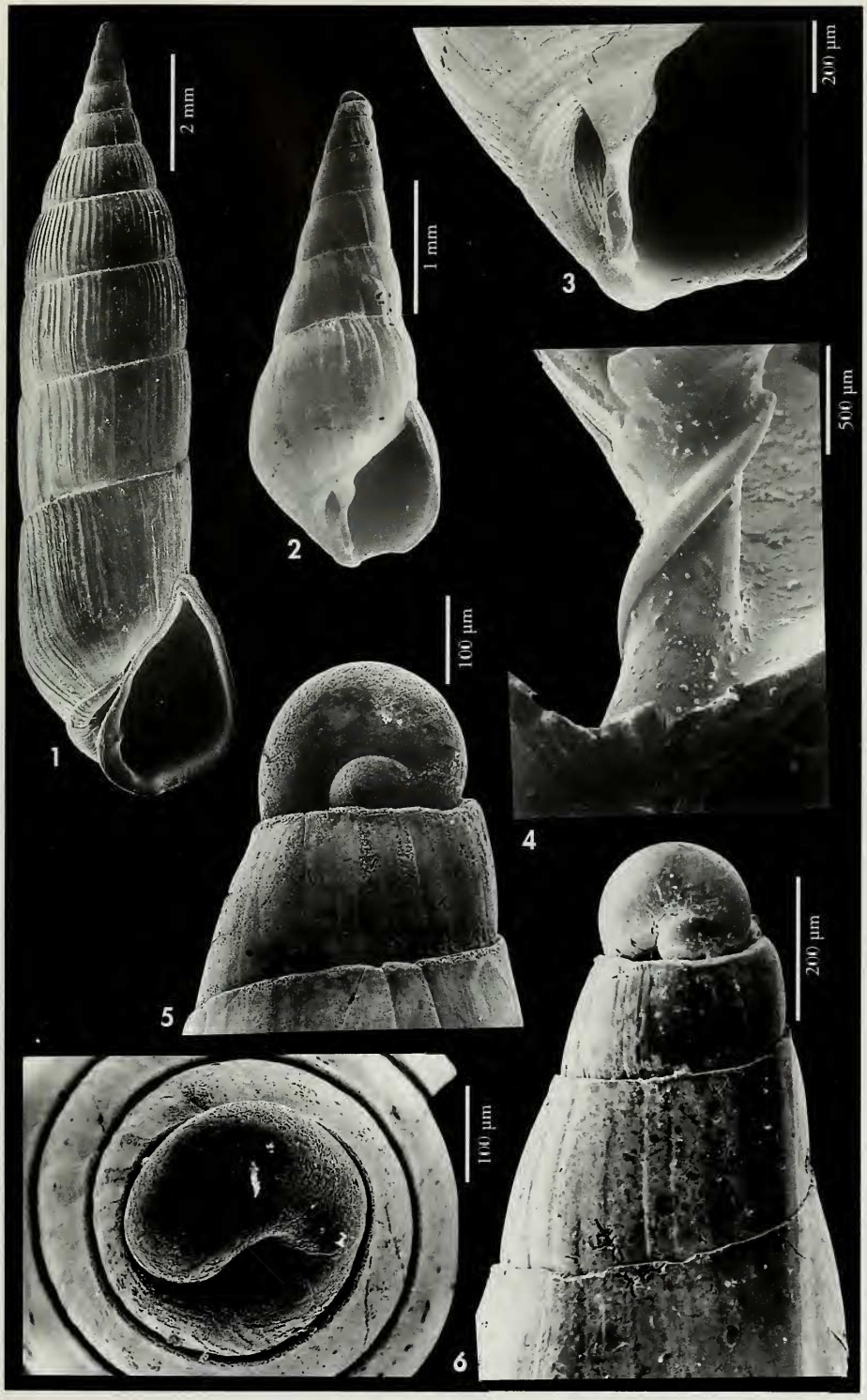
Remarks: The genus *Afroturbonilla* has a superficial resemblance to the type species of the genus *Paradoxella* Laseron, 1959, *Paradoxella ambigua* Laseron, 1959, by original designation. We here agree with Shigeo Hori (personal communication) that *Paradoxella* is a synonym of *Styloptygma* A. Adams, 1860, with the type species, *Monoptygma stylina* A. Adams, 1853, by original designation. The type species of *Styloptygma* was renamed *Pyramidella* (*Styloptygma*) *typica* Tryon, 1866 owing to homonymy. This is in contrast to Schander, Aartsen and Corgan (1999) that considered *Styloptygma* and *Paradoxella* separate genera. *Afroturbonilla* is also similar to the type species of *Syrnolina* Dall and Bartsch, 1904, *Odostomia rubra* Pease, 1868, by original designation.

The type species of *Styloptygma* has a shell with a deeper suture and more convex whorls. The type species or *Paradoxella* is more uniformelly elongate, with a smaller last whorl. The three type species of the genera *Styloptygma*, *Paradoxella* and *Syrnolina* are smaller in size and they are all lacking an umbilicus and the distinct ridge surrounding it, and have a different profile that *Afroturbonilla*. All known species of these three genera are from the Pacific Ocean.

Afroturbonilla hattenbergeriana n. sp. (Figs. 1-12)

Type material: Holotype (Fig. 1), specimen with dried soft parts inside; and 4 paratypes (2 juvenile and 2 fragments); from 20 m, Cacuaco, Bengo, Luanda, Angola, deposited in the Museo Nacional de Ciencias Naturales, Madrid (Accession number 15.05/33303). Additional paratypes are placed in the following institutions: 1 shell and 2 fragments from 25 m, Dakar, Senegal, in Muséum National d'Histoire Naturelle, Paris; 2 juveniles, one from 2 m, Club Nautique, Congo, and another from 2 m, Pointe Indienne, Congo, in collection of P. H. Hattenberger; 1 shell and 1 juvenile, from 20 m, Palmeirinhas, Luanda, Angola, in collection of A. Peñas; 1 shell, 2 juveniles, 5 fragments, intertidal, Banc d'Arguin, Mauritania, and 4 juveniles (Fig. 2), from 30 m, Miamia, Ghana, in collection of E. Rolán; 3 juveniles, Dakar, Senegal, in collection of J. Pelorce.
Type locality: Cacuaco, Luanda area, Bengo province, Angola.
Etymology: The species is named in honor of Paul Henri Hattenberger who has collected some of the material of *A. hattenbergeri* who kindly put his collection of West African shells at our disposal.

(Right page) Figures 1-7. *Afroturbonilla hattenbergeriana* n. sp. 1: Holotype (MNCN), Cacuaco, Angola; 2: juvenile shell, Miamia, Ghana; 3: detail of the aperture of a juvenile shell; 4: detail of the internal part of the columella, Congo; 5: protoconch, Senegal; 6: protoconch, Ghana; 7: protoconch and first whorls, Angola.
(Página derecha) Figuras 1-7. Afroturbonilla hattenbergeriana *spec. nov. 1: Holotipo (MNCN), Cacuaco, Angola; 2: concha juvenil, Miamia, Ghana; 3: detalle de la abertura de una concha juvenil; 4: detalle de la parte interna de la columela, Congo; 5: protoconcha, Senegal; 6: protoconcha, Ghana; 7: protoconcha y primeras vueltas, Angola.*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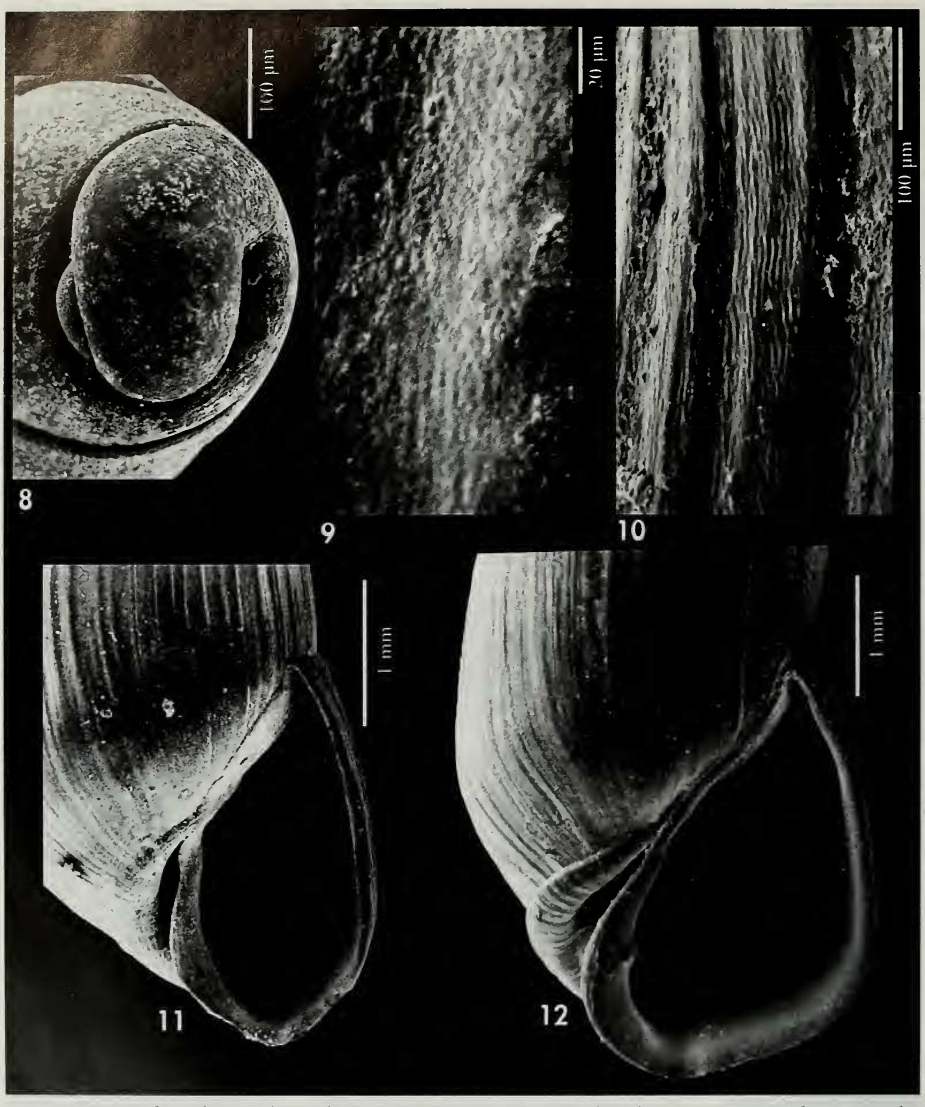

Figures 8-12. *Afroturbonilla hattenbergeriana* n. sp. 8: protoconch, Ghana; 9: microsculpture on the sixth whorl (holotype); 10: microsculpture on last whorl (holotype); 11: aperture of a juvenile shell, Dakar, Senegal; 12: aperture of the holotype.

Figuras 8-12. Afroturbonilla hattenbergeriana *spec. nov. 8: protoconcha, Ghana; 9: microscultura de la sexta vuelta (holotipo); 10: microscultura de la última vuelta (holotipo); 11: abertura de una concha juvenil, Dakar, Senegal; 12: abertura del holotipo.*

Description: Shell (Fig. 1) cylindric-conoid elongate with a sharp apex, fragile, slightly translucent and whitish. Protoconch (Figs. 5-8) small in relation to the size of the shell, of type B tending towards A (in the classification of AARTSEN, 1987), planispiral and 250 μm in diameter, showing one whorl with visible nucleus partially sunk into teleoconch. Teleoconch beginning with 5 or 6

smooth whorls (Figs. 1, 2, 6), increasing quickly in diameter giving the shell a conical shape. Thereafter numerous axial riblets appear, weakly marked and slightly irregular. The subsequent 1-2 whorls increase regularly in diameter but the following keep the same diameter giving the shell a cylindrical profile. The last whorl represents one-third of the total shell length and has a strong cord surrounding the umbilicus near the base. Umbilicus is narrow but deep. The cord is present also in juvenile shells (Figs. 2, 3), being then less marked, and becoming stronger with growth (Figs. 11, 12). Aperture is semicircular and slightly pyriform. The visible part of the columella is slightly undulating and without any fold. Columellar fold is visible in juvenile specimens, and a well-demarcated prominent fold is present on the internal part of the columella in broken shells (Fig. 4). Outer lip is smooth, narrow and without any folds. The curvature is slightly irregular, extending both to the base and to the external part of preceding whorl. The micro-sculpture is not readily visible in the initial teleoconch whorls, but a rough surface is visible in high magnification in the following whorls (Fig. 9). This surface is formed by many microscopic depressions. In the subsequent whorls there are axial undulations between and on the axial ribs (Fig. 10).

Dimensions: The holotype is 14.3 x 3.8 mm. Another shell, destroyed during the study, reached 15 mm in height.

Distribution: This is a rare species. Shells and shell fragments have been found from Mauritania to Angola.

Discussion: There is no African species with a profile similar to *Afroturbonilla hattenbergeriana*. Juvenile shells can resemble species of shells belonging to the genus *Syrnola* A. Adams, 1860, but the presence of an umbilicus and the surrounding cord differentiate them.

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